

Application No. 10/809,667
Docket No. 56681.US/4978.5

REMARKS

Claims 1-11 and 17-27 remain in the application. By the foregoing amendment, claims 12-16 and 28-42 are cancelled and claims 1, 5, 17, and 21 are amended generally in accordance with the examiner's suggestions. Claims 1, 5, 17, and 21, as amended, more clearly and distinctly claim the invention. Support for the amendment to claims 1, 5, 17, and 21 can be found in the specification on page 13, lines 4-6. No new matter is entered into the case by the amendment. The foregoing amendment was submitted at the request of the examiner and is believed to put the case in condition for allowance.

Applicants greatly appreciate the courtesies extended to the undersigned attorney by the examiner in a telephone interview conducted between the undersigned attorney and the examiner on February 27, 2006, in which the L/D terms in the claims were discussed with reference to the different L/D ratio described in the cited reference. The substance of the interview discussion is contained in this response.

In the Office Action, the restriction requirement was made final. Accordingly, applicants have now cancelled the withdrawn claims, claims 12-16, and 28-42, however this cancellation was made without prejudice. Applicants reserve the right to carry forward these claims in a continuation application.

Also, in the Office Action, claims 1-11 and 17-27 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. Claims 1-11 and 17-27 were rejected 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,811,040 to Mallonee and under 35 U.S.C. §103(a) as being unpatentable over the '040 patent. The rejections under 35 U.S.C. §112, §102(b), and §103(a) are respectfully traversed.

A. The §112, Second Paragraph Rejection Is Overcome By the Amendment.

As set forth in the specification and explained to the examiner in the telephone interview referenced above, the terms "depth" and "length" are interchangeable in the specification. Applicants could have used the short hand notation (D/D), however, this would have been less clear than the terminology that was used, i.e., L/D. However, in order to further clarify what ratios are important to the claimed invention, applicants have replaced the term "L/D" in the claims with the terms "depth to hydraulic diameter,"

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which terms are clearly set forth in the specification on page 13. Applicants believe the foregoing amendment is sufficient to overcome the §112, second paragraph rejection. Hence, reconsideration and withdrawal of the rejection are respectfully requested.

B. Claims 1-11 and 17-27 Are Not Anticipated By The Cited Reference.

In the rejection of claims 1-11 and 17-27, the examiner relies on the '040 patent to Mallonee. However, for the '040 patent to anticipate the claims, every limitation of the claims must be found in a single reference, either explicitly or inherently.

Applicants have unexpectedly found that the depth to hydraulic diameter ratio is a very important parameter for selecting the position of the nylon fibrils with respect to the bulk filament cross-section. In particular, proper selection of a suitable depth to hydraulic diameter ratio, as claimed, can be used to substantially reduce the presence of nylon fibrils on the exterior surface of each filament, as demonstrated by Figures 5-8 and Example 6. Applicants submit that this important depth to hydraulic diameter ratio is not taught, suggested, disclosed in the '040 patent.

As explained in the telephone interview referenced above, the use of L/D ratios in the '040 patent is only with reference to the dimensions of the fibrils that are embedded in the matrix of the filaments. These fibrils are orders of magnitude less than the dimensions of the filaments which may more closely resemble the capillary openings than the fibrils do. Applicants' invention, on the other hand, relates to controlling the position of the fibrils in the matrix polymer by changing the depth to diameter ratio of the capillaries used to extrude the filaments as described in applicants' response filed on 11 October 2005. There is nothing in the '040 patent that teaches, suggests, or discloses such a relationship and the benefits thereof. Since the '040 patent fails to teach suggest or disclose all of the limitations of the claimed invention, the rejection of claims 1-11 and 17-27 is wholly untenable and should be withdrawn.

C. The Rejection of Claim 1-11 and 17-27 Over The Cited Reference Is Untenable.

In the §103(a) rejection of claims 1-11 and 17-27, the examiner again cites the '040 patent. The failure of the '040 patent to suggest or disclose the important depth to

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hydraulic diameter ratio as described above and is incorporated herein by reference thereto.

The '040 patent is silent about the effect of L/D on the distribution of fibril forming polymer inside a single fiber of bi-component yarns, such as a fiber composed of a polyolefin matrix and containing a plurality of nylon fibrils embedded in the polyolefin matrix. Likewise, the examiner has not cited any references which support the assertion that one skilled in the art would be motivated to optimize the depth to hydraulic diameter ratio to achieve the important, unexpected results achieved by the claimed invention. Accordingly, since the examiner has failed to make out a prima facie case of obviousness, the §103(a) rejection of claims 1-11 and 17-27 is wholly untenable. Reconsideration and withdrawal of the rejection are respectfully requested.

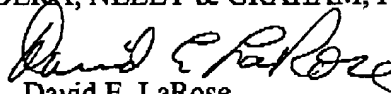
In view of the foregoing amendments and remarks, it is respectfully requested that the amendment be entered and that rejections of claims 1-11 and 17-27 be withdrawn, and that claims 1-11 and 17-27 be allowed.

In the event this response is not timely filed, Applicants hereby petition for the appropriate extension of time and request that the fee for the extension, along with any other fees which may be due with respect to this paper, be charged to our Deposit Account No. 12 2355.

Respectfully submitted,

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By:



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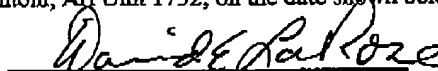
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*** * * CERTIFICATE OF FACSIMILE TRANSMISSION * * ***

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office at 571-273-8300, Attn: Examiner Leo B. Tentoni, Art Unit 1732, on the date shown below.

on February 27, 2006


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